



Revision number: 2

Purchasing Agent: Debbie Gundersen

**ITEM: CATCH BASIN & CULVERT CLEANING MACHINE: NEW EQUIP.**

VENDOR: 10965B A A G BODY INC.  
P.O. BOX 27755  
SALT LAKE CITY, UT 84127

Internet Homepage: [www.agbody.com](http://www.agbody.com)

Telephone: (801) 975-0400

Fax number: (801) 975-7567

Contact: John P. Leroy

Email address: [spl@agbody.com](mailto:spl@agbody.com)

Brand/trade name: International 2574/Vactor 2110

Price: See attached price list.

Terms: Net 30

Effective dates: 11/09/00 through 11/09/02

Days required for delivery: 120-180 days

Price guarantee period: 1 Year

Minimum order: One

Min shipment without charges: Included in Price

Other conditions:

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REVISION #2: EXTENDING THIS CONTRACT UNTIL 11/09/03. Note Manufacturers price increases.

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This contract resulted from bid DG1088

This contract covers only those items listed in the price schedule. It is the responsibility of the agency to ensure that other items purchased are invoiced separately. State agencies will place orders directly with the vendor (creating a PG in Finet) and make payments for the same on a PV referencing the original PG. Agencies will return to the vendor any invoice which reflects incorrect pricing.

**NEW CATCH BASIN & CULVERT CLEANING MACHINE****INTERNATIONAL 2574/VACTOR 2110****DELIVERED: \$209,880.00**

The machine is to be a new unit of current model. It is to meet the following minimum specifications, but is not limited as to features furnished by the manufacturer. Machine is to have all standard features unless otherwise specified below. Also it is to be delivered serviced, tested and ready to operate with correct fluids at operating levels and with a full tank of fuel. Equipment furnished to the State of Utah must meet current State and Federal safety regulations. The warranty shall include parts, labor reimbursement and for repetitive problems, reasonable towing or road call travel costs reimbursement.

Basic Warranty Period: 1 YEAR/50,000 MILES

Engine Warranty period: 5 YEAR/500,000 MILES

Transmission Warranty period: 3 YEAR/300,000 MILES

Rear axle Warranty period: 5 YEAR/500,000 MILES

Frame Warranty period: 5 YEAR/UNLIMITED MILES

Chassis other Warranty period: 5 YEAR UNLIMITED CAB

Other: STRUCTURE PERFORATION AND CORROSION

**CAB AND CHASSIS**

**WHEELBASE:** Spec wheel base to match truck manufactures GVWR of 66,000 lbs. minimum.  
C-A: 180"  
Wheel Base: 258"

**ENGINE** Wet sleeve, 370 hp. minimum 14 liter electronic diesel engine at 2100 rpm speed. 1450 torque minimum at 1200 rpm  
Confirm HP 370 @ RPM 2100  
Confirm Torque 1450 @ RPM 1200

**ENGINE** Spin on oil filter and fuel filter.  
**EQUIPMENT** Single stage heavy duty air filter.  
Air clutch fan, Kysor preferred.  
1500watt/120 volt block heater with cab mounted receptacle.  
Engine mounted compression brake with 2 or 3 step control.



Ignition key (solenoid) shut off.

**CHARGING  
SYSTEM**

110 amp minimum alternator, internally regulated, Delco 33si preferred. 3 each, group 31 batteries, to produce 2775 cca preferred. Battery box, to be mounted under cab.

**COOLING  
SYSTEM**

Premium coolant hoses and constant torque clamps.  
1000sq. ft. minimum frontal area 3 row increased cooling radiator.  
System to have a surge tank and be protected to -35<sup>0</sup> F.

**EXHAUST**

Vertical muffler stack with shield, pipe RH with turnout preferred.

**BRAKE  
EQUIPMENT**

To have minimum 18.7 cfm air compressor. One air tank per axle.  
Bendix or Midland heated air dryer. Manual air tank drain valves if accessible or pull cables to drain tanks.

**TRANS.**

To have a Allison HD 4560 P six speed with premium ECU feature.  
To have a water to oil transmission cooler.

**REAR**

Tandem drive axles with power divider, 46,000 lb "Rockwell" **AXLE**  
RT-46-160 or equal, ratio: 4.89.

**REAR  
SUSPENSION**

Hendrickson HN 462-54, rated at 46,000 lb. or equal.

**DRIVE SHAFTS**

Tubular drive shafts with coated splines and strap type yokes.  
Inter-axle shaft with coated splines and strap type yokes.

**FRONT AXLE**

To be Rockwell or approved equal, capacity 20,000 lb., minimum.  
Oil type hubs with Stemco or C.R. seals and visible caps.

**FRONT  
SUSPENSION**

Capacity 20,000 lbs. minimum.

**SERVICE  
BRAKES**

Cam brakes, 16 ½ X 6, on front axle. Cam brakes, 16 ½ X 7, on rear axle with anchor lok life seal 3030 brake chambers. To have Eaton Haldex automatic slack adjusters or approved equal. ABS brakes on full vehicle.

**PARKING  
BRAKE**

Maxi II or approved equal brakes on both axle of tandems.

**STEERING  
SYSTEM**

Ross dual power steering system or approved equal.

**WHEELS AND  
TIRES**

Tubeless Radial 425/65R22.5-20 ply.  
Goodyear Unisteel G286



Disc 10 H Steel 22.5x12.25. ISO  
Tubeless Radial 11R22.5-16 ply.  
Goodyear Unisteel G167A  
Disc 10 H Steel 22.5x8.25 ISO

<b>FUEL TANK</b>	Dual 60 gallon tanks (minimum) to be mounted below cab doors.
<b>FRAME</b>	Fabricated from 30.0 sm 110,000 psi minimum, double channel, steel. Variable noise sensing back up alarm. Turn signals front and rear, hazard warning lights, tail and brake lights. Square cut frame ends. To have rear tow hooks.
<b>CAB AND ACCESSORIES</b>	<p>Cab width, measured inside of doors must be a minimum of 68 inches. A minimum of 75 inches is preferred. Lower edge of windshield to back of cab inside dimension to be a minimum of 51 inches. To have rear cab window. Fiberglass full tilting hood with all heavy duty options.</p> <p>Dual air horn with snow shields. Tinted windshield, intermittent electric windshield wipers with heavy duty 2 speed motor. Dual Western stainless/heated mirrors. Right head motorized. Heated spot mirrors mounted under regular mirrors. Heavy duty air conditioning and heater. AM/FM Stereo radio with cassette and weather band. 18 inch diameter steering wheel, dual sun visors, five amber cab marker lights, grab handles on both sides.</p>
<b>SEATS</b>	Seat belts, driver and passenger, lap and shoulder. Driver, National HighBack Air Suspension with Lumbar Support. Passenger, National High-Back Air Suspension seat. Both seats to be cloth and have arm rests.
<b>INSTRUMENTS</b>	<p>Voltmeter, fuel gauge, coolant temperature gauge, exhaust pyrometer, engine oil pressure gauge, air pressure gauge, hour meter, tachometer, transmission oil temperature, engine oil temperature, rear oil temperature, speedometer and locking air filter restriction gauge. To have inter-axle lock warning light. To have low air pressure warning light and buzzer. Warning lights and buzzer for low coolant level, high coolant temperature and low engine oil pressure. All instruments to be dash mounted.</p>
<b>PAINT</b>	Complete unit to be painted manufactures color white. Includes all wheels, cab, and bumper. No chrome to be painted. Make and model emblems allowed but all other advertising to be omitted. The frames may be painted black.
<b>MOUNTED EQUIPMENT</b>	
<b>DEBRIS BODY</b>	Debris tank is to be of a 10 yard capacity, cylindrical design, with a



minimum of 3/16 inch corrosion and abrasion steel with a minimum yield point of 50,000 psi tensile strength of 70,000 psi. Emptying will be of a dumping design with the rear door opening on a hydraulic opening devise and hydraulic rear door lock design to prevent accidental opening of debris door due to loss of hydraulic power. Dumping and door controls shall be located curbside forward of debris body. All hinges and pivot points shall have grease fittings.

Debris tank to have internal permanent mounted high pressure flushing system with nozzles mounted at the front interior of debris body. Tank will have external float type debris lever indicator. A 5" screen protected butterfly-gate valve with 10 feet of lay flat hose and storage rack, placed on rear of unit, for water decanting.

Dual 10" stainless steel ball floats, cage and screen are to be located in each outlet to vacuum source to stop the airflow to the body (or approved equal). A pipe storage rack to be located on the curbside of the debris body above the rear water tank, spring assisted for movement between storage or work position. A splash shield constructed of steel shall be mounted on the rear flange of the debris body and located from the 3 to 9 o'clock position.

## **WATER TANKS**

Minimum of 1600 gallons, constructed of non-corrosive metal or ultraviolet stabilized stress-reinforced polyethylene. Tanks will be interconnected with 6" and 4" connections minimum to provide uniform filling and designed to allow removal of any single tank and still maintain full operation ability of unit. All tanks shall be located above high pressure water pump inlet to provide flooded suction to pump. The water tanks shall be placed on the chassis to maximize weight distribution and not exceed the rated GVWR on either the front or rear axles fully loaded with water.

A 2" "Y" pattern filter with an 80 mesh stainless steel strainer shall be supplied to filter the water before it enters the water tank. A 3" "Y" strainer of duplicate design is to be supplied prior to the water pump suction inlet to serve as an additional filtering devise. A water sight gauge shall also be provided. The water tanks shall carry a 10 year non-prorated warranty against corrosion or cracking.

## **WATER PUMP**

The rated design capacity of the high pressure water pump shall be 100 GPM at 2500 PSI.. A certification by the pump manufacturer of this rating shall be provided. The pump will deliver a minimum of 80 GPM at 2500 PSI as measured before the water enters the hose reel. The pump shall be hydraulically driven (or approved equal). Oil filled pressure valve to be located at the front of the truck. Unit to have water purge system and cold weather water recirculating system to prevent freezing during work hours in sub-zero temperatures. The water pump shall carry a 2 year non-



prorated warranty against failure.

The water pump shall be capable of running dry for a period of 1 hour at full operating RPM without damage. A certification from the original pump manufacturer to operate in such a manner shall be provided. The water pump shall also have the capability to run in a "jackhammer" mode, without causing cavitation or damage to the water pump.

**VACUUM  
SYSTEM**

Vacuum shall be created by a minimum of two 38" diameter centrifugal fans or three 28" fans.

**VACUUM**

The vacuum system will be driven via a fluid coupler or (approved equal) that permits engagement of the fan without the use of a mechanical clutch mechanism.

**HYDRAULIC  
SYSTEM**

To be one system to supply all hydraulic power needs on unit. Filters mounted in the demand line from the supply tank. A manual by-pass system shall be provided to power the hose reel and boom functions in the event of hydraulic power failure.

**BOOM**

Hydraulic powered up/down, left/right, and in/out. Eight (8) inch i.d.. hose with attachable extensions and clamps. Schedule 80 heavy duty radius elbow where suction hose makes transition from horizontal to vertical change. Cab protection devise so as to prevent the boom from contacting the cab of truck. Front mounted location for in-transit storage and positioning. 180 degrees minimum rotation left and right from front of truck.

Unit shall have a minimum of 4 foot true telescoping boom extension without affecting the steel elbow or lower debris hose vertical position. The available work area of the boom is to be a minimum of 121 square Feet. A permanently mounted joy-stick control in the panel at operators station and also a pendant control for remote operation of the boom.

**REEL/OPERATOR  
STATION**

Reel mounted on front truck frame rails with 180 degree (min) rotating capability. Reel is not to exceed beyond the width of chassis in any position. Reel shall extend forward a minimum of 15" for access to truck engine compartment. Hose reel shall have a rotation locking device to stabilize reel for operation. Reel to have a capacity of 600 ft. of 1" hose and come equipped with 500 ft. of 1" hose, 2500 operating pressure, 7500 psi burst pressure. Controls for the operation of the hose reels shall be provided on each side of the hose reel. An automatic, "hands free" level wind device shall be provided with tensioning device. A backup, manual wind device is to be provided.



**Gages needed at operators station:**

Oil filled water pressure gauges  
Electronic chassis throttle control  
On/off water pressure control valve  
Auxiliary engine start/stop  
Auxiliary engine electric throttle control  
Vacuum breaker switch  
Boom control joy stick  
Reel speed control and direction control  
Reel rotation stop  
Reel hydraulic extend switch  
Low water level light with audible alarm

**HANDGUN  
SYSTEM**

The handgun will be set at an operating pressure and flow of 20 GPM at 600 PSI and to be relieved to protect operator. The handgun system will include quick disconnects located at the front, mid-ship, and rear of the unit. A 50' x 1/2" capacity spring rewind reel with 50' of hose and quick coupler shall be mounted on the curbside of the unit. The handgun shall allow for changing of flow pattern from fine mist to a steady stream.

**PAINT**

All surfaces to be shot or sandblasted prior to paint. All surfaces to be cleaned by phosphorous wash process prior to painting. Module shall have a minimum of two and one half mill of suitable primer and have a minimum of three mil of acrylic urethane paint applied. Module and components shall be painted prior to assembly process. All hoses, fittings, electrical wires and connections shall not be painted. To be white in color.

**ELECTRICAL**

Entire system to NEMA 4 standards. Shock mounted light bulbs, wiring to be color coded and sealed.  
To have rear mounted split arrow directional arrow board.  
To have a Star 9404 cab mounted light bar (or approved equal).

**TOOLS**

One (1) 1' 30 Degree sanitary nozzle.  
One (1) 1' 15 Degree penetration nozzle with front orifice.  
One (1) 6' 66lb. Large pipe nozzle with replaceable orifices and swivel joint.  
One (1) Enz 1' Chisel nozzle.  
One (1) 'Tiger tail'.  
One (1) Nozzle pipe.  
Hydrant wrench.

**FILTERS**

One complete set of replacement filters for each unit delivered.

**PARTS AND  
SERVICE**

Bidders should list sources of parts and service for the proposed equipment. Service center will be located in the Salt Lake City area, consideration will not be given to bidders unable to satisfy the Utah Department of Transportation or the Utah Division of Purchasing as to the



adequacy of their service facilities and the availability of replacement parts

Delivery must include dealer's invoice and a copy of warranty.

Delivery must include an operator's manual for each unit.

Delivery to include 3 training videos.

Delivery must also include 3 complete sets of manuals including: operator's manual, parts lists and shop (repair) manuals for all components including engine, transmission, axles and chassis etc. Cost of these manuals is to be included in the bid.

Delivery must include MSO, application for title, odometer statement, and safety inspection.

A minimum of 16 hours of training will be supplied by the vendor.

Invoices will not be approved for payment until all of the required documentation is correct and manuals have been received.

Chassis Options per International Price Book Dated 7/17/00

Less <31 %> Discount

5- Yard Debris Body	No Charge
12-Yard Debris Body	\$3,577.00
15-Yard Debris Body	\$8,176.00
1000 Gallon Water Tanks	<\$2,040.00>
1300 Gallon Water Tanks	<\$1,533.00>
6" Knife Valve on Rear Door	\$971.00
6" Decant System w/Air Operated Knife Valve-	\$1,661.00
Debris/Water Tanks Combined	\$1,737.00
Submersible Trash Pump - Internal mount	\$7,895.00
Submersible Trash Pump - External mount	\$8,483.00
Plumb Trash Pump to Front Bumper	\$1,763.00
Folding Pipe Rack	\$ 741.00
Centrifugal Seperator	\$3066.00
Lube Mantifold	\$1,635.00
650 Gallon Street Flusher	\$15,713.00
Single Stage Fan in flue of 2-Stage Fan	<\$5,110.00>
Holmes HR80/42/15" Blower in lieu of 2-stage fan	<\$1,022.00>
Roots 824RCS/16" Blower in lieu of 2-stage fan	No Charge
Roots 824RCS/1 8" Blower in flue of 2-stage fan	\$ 2,044.00
Roots 1024RAS/1 8" Blower in lieu of 2-stage fan	\$ 4,088.00
Air Shift Controls for PID Unit	\$ 1,329.00
Vacuum -Relief System	\$ 1,916.00
8' Hydraulic Extendable Boom	\$5,340.00
Multiflow System	\$3,322.00
Water Recirculation System for PD Units	\$1,533.00
Additional 1 00'of Sewer Cleaning Hose	\$ 256.00
Rodder Pump Drain Valves	\$ 307.00
Hydraulic Tool Package	\$1,124.00
Tachometer	\$ 511.00



Engine Safety Shutdown Switch	\$ 240.00
Work Lights on Boom	\$ 562.00
Handlight with Retractable Reel	\$ 409.00
Revolving Light on Cab Guard	\$ 460.00
Limb Guard for Lights	\$ 128.00
Additional Tool Box	\$ 562.00
Root Cufter Kit	\$1,635.00

**REPORTS:**

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THE CONTRACTOR WILL SUBMIT YEARLY REPORTS TO THE STATE PURCHASING AGENT (DEBBIE GUNDERSEN) SHOWING QUANTITIES AND DOLLAR VOLUME OF PURCHASES BY EACH AGENCY AND POLITICAL SUBDIVISION. THIS REPORT WILL BE DUE 11/09/2001.

**FINET COMMODITY CODES:**

76521000000 -

CULVERT CLEANING EQUIPMENT